

## Antibiotic Sensitivity of *Staphylococcus aureus* isolated from hospitalized patients in Surabaya Indonesia

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### Abstract

The objectives of this study were to isolate and identify *Staphylococcus aureus* from clinical specimen of hospitalized patients in several hospital in Surabaya, Indonesia, and to analyze the antibiotic sensitivity of the isolate. A total of 28 *Staphylococcus aureus* isolates were collected from clinical specimens of hospitalized patients in 4 hospital in Surabaya, Indonesia within 1 month. The isolated bacteria were identified in laboratory by staining and biochemical characterization. Antibiotic sensitivity were determined for tetracycline, penicillin, cotrimoxazole, levofloxacin, and chloramphenicol using the disc diffusion method according to Clinical and Laboratory Standards Institute guidelines. The antibiotic sensitivity test showed that the most of isolates were sensitive to cotrimoxazole (n=22;79%), chloramphenicol (n=21; 75%), and levofloxacin (n=20; 72%), meanwhile there's only 57% (n=16) of isolates were sensitive to tetracycline and penicillin. Based on this study, it can be concluded that the isolates of *Staphylococcus aureus* from several hospitalized patients in Surabaya, Indonesia were resistant to tetracycline and penicillin. However, there is still a need to conduct a long term research study in order to analyze the antibiotic sensitivity pattern.

**Key words:** antibiotic, sensitivity, *Staphylococcus aureus*

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